The Use of Aldomet® (alpha methyl dopa) In the Treatment of Neurogenic Bladder

PATIENTS SUFFERING from neurogenic bladder dysfunction (upper neuron and lower neuron lesion) have been treated with Aldomet® (alpha methyl dopa) to cause relaxation of the pelvic floor. Patients most suitable for this therapy are those with good bladder capacity and high residual urine. Aldomet's mechanism of action is probably central (acting through the main metabolite alpha-methylnorepinephrine). This substance stimulates alpha-inhibitory receptors in the supraspinal centers, blocking the sympathetic activity. This effect will facilitate bladder contraction and reduce urethral resistance.

The minimal side effects, the familiarity of the medical community with the use of this drug and its effectiveness in upper neuron lesion patients make Aldomet another drug useful in the urological armamentarium.

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Value of Saralasin Test in Detection of Human Renovascular Hypertension*

PATIENTS WITH renovascular hypertension can be distinguished from most patients with essential hypertension by the use of a new drug, saralasin (1-sar-8-alatangiotensin II) (Eaton Laboratories, Norwich, New York). Saralasin acts by specific competitive inhibition of angiotensin II at receptor sites. In this study it was administered intravenously before and after furosemide-induced salt depletion.

In patients with subsequently confirmed renovascular hypertension, blood pressure decreased toward normal after saralasin administration. The depressor effect could be discerned readily with standard monitoring equipment ten minutes after a large bolus injection of the drug; or the effect could be sustained for longer periods by continuous infusion of the drug. In some patients with renovascular hypertension there were elevated peripheral renin levels or lateralizing renal vein renin ratios, or both; however, in several others these were not present. Yet all of the patients responded to saralasin administration. Thus the basic pathophysiology of renovascular hypertension was correctly identified by saralasin responsiveness, but not always by the renin determinations.

In patients with essential hypertension or incidental stenoses, usually no lowering of blood pressure occurred after saralasin administration. However, in the occasional patient with high-renin essential hypertension, the response to saralasin was similar to that seen in patients with renovascular hypertension. Thus the saralasin test is specific not for renovascular hypertension per se, but for renin-mediated hypertension.

The saralasin test appears to be of greatest value as a rapid screening procedure to help determine in which hypertensive patients further search for a renovascular cause should be carried out. The saralasin test may also be used to justify operation in patients in whom hypertension, severe renal artery stenoses and equivocal renin data are noted. The test appears to be completely valid and safe provided (1) administration of other antihypertensive medication is discontinued beforehand, (2) the patient is mildly salt-depleted and (3) genuine hypertension is present at the time of the test.

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Experience with the Transverse Colon Conduit for Supravesical Urinary Tract Diversion

TRANSVERSE COLON conduit urinary diversion has been used in patients in whom extensive prior pelvic irradiation therapy has been done. Carcinoma of the urinary bladder and uterine cervix were the most common primary diseases for which irradiation therapy was administered. Indications for urinary diversion included severe

radiation cystitis, vesicovaginal fistula with or without residual malignancy, and ureteral obstruction.

This type of diversion affords the use of nonirradiated bowel as well as the ureter above the field of irradiation. Single layer end-to-side ureterocolic anastomoses were constructed without the use of antireflux techniques or ureteral stents. Complications were related to the patients' general condition and prior irradiation as well as to specific technical problems. Complications requiring additional surgical procedures included ureterocolic extravasation and obstruction, abdominal wound dehiscence, stomal prolapse and peristomal hernia.

Patients with preoperatively normal upper urinary tracts remained normal following diversion. Patients with unilateral or bilateral ureteral obstruction preoperatively tended to improve. The transverse colon conduit has been free of stomal stenosis, renal function changes or high residual urine volumes and should be considered the preferred intestinal segment for use in patients with extensive pelvic irradiation therapy.

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Avascular Renal Adenocarcinoma: Variations and Characteristics

THE CHARACTERISTIC NEOVASCULARITY seen in patients with renal carcinoma is absent in 10 percent of patients with this neoplasm. These tumors frequently simulate benign lesions and have varied diagnostic characteristics. All modalities including intravenous pyelography, nephrotomography, ultrasonography, cyst puncture with cystic fluid assessment, angiography and operation with tissue specimens submitted for pathologic examination may be required before diagnosis is established. An orderly approach to the evaluation of lesions will allow accurate diagnosis approaching 100 percent with minimum morbidity. Attention to the finer details of vascular patterns on angiography has proved to be a very helpful diagnostic aid. Suspicion of carcinoma increases if, on a selective angiogram, there is (1) thickening of the "cyst" wall, (2) a rim vessel following the circumference of the lesion, (3) pericystic or capsular vessels entering an otherwise avascular mass, (4) increased vascularity of the parenchymal border and (5) contrast pooling, even to a minor degree, in a lesion on a delayed nephrogram. If aspiration of the tumor is done, histochemical, cytologic and radiographic examinations are necessary to diagnose these elusive lesions.

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Very Selective Renal Vein Renin Determination in the Diagnosis of Segmental Renal Hypertension

CATHETERIZATION of the main renal vein for renin assay is valuable in determining the clinical significance of a renal abnormality in a hypertensive patient. However, findings from main renal vein catheterization can be misleading in the presence of renin producing lesions that do not affect the whole kidney. Dilution of renin-rich segmental blood in the main renal vein, incomplete mixing or "streaming," and the presence of an accessory renal vein are reasons that a significant ratio is not found.

Catheterization of segmental renal veins should improve the accurate detection of renin mediated hypertension. We use bilateral, small diameter catheters, preshaped for upper and lower pole segmental vein placement, and have consistently obtained blood from any area of interest within a kidney. Simultaneous samples are obtained from both the normal and the abnormal portion of the kidney. Sampling error is reduced since the catheter tip is not easily dislodged from a small vein when the kidney moves with respiration or by change of position of the patient. The failure to catheterize a portion of a kidney alerts the angi-